AMENDMENTS TO THE CLAIMS

1-20. (Cancelled)

21. (Currently amended) A method for controlling a servo operation of an optical recording medium including a non-writable area having a plurality of header fields with at least one header field staggered with respect to another header field, the method comprising:

(a) determining a difference between a first synchronization reference signal included in the one header field and a second synchronization reference signal included in said another header field, wherein the determined difference between the first and second synchronization reference signals represents a radial tilt of the optical recording medium; and

(b) controlling the servo operation of the optical recording medium based on the determined difference in the step (a).

22. (Previously presented) The method of claim 21, wherein the first and second reference signals respectively correspond to read channel 2 signals obtained from the one header field and said another header field, said read channel 2 signals corresponding to a difference between reflected signals obtained by a split photo detector.

23. (Previously presented) The method of claim 21, wherein the first and second reference signals comprise VFO (Variable Frequency Oscillator) signals.

24. (Canceled).

25. (Currently amended) The method claim ~~24~~21, wherein the controlling step (b) controls the servo operation of the optical recording medium to compensate the radial tilt based on the determined difference between the first and second reference signals.

26. (Currently amended) The method of claim ~~24~~21, wherein the determining step (a) further includes detecting a magnitude and/or a direction of the radial tilt.

27. (Previously Presented) The method of claim 26, wherein the controlling step (b) controls the servo operation of the optical recording medium to compensate the radial tilt based on the detected magnitude and/or direction of the radial tilt.

28. (Previously presented) The method of claim 23, wherein the plurality of header fields include at least first, second, third and fourth header fields, and said one header field corresponds to the first header field and said another header field corresponds to the third header field in which the first header field is staggered with respect to the third header field.

29. (Previously presented) The method of claim 28, wherein the determined difference between the first and second reference signals corresponds to a level difference between the VFO signal of the first header field and the VFO signal of the third header field.

30. (Previously presented) The method of claim 28, wherein the step (a) determines the difference between the first and second reference signals by comparing a potential difference

between a track center and the VFO signal of the first header field with a potential difference between the track center and the VFO signal of the third header field.

31. (Previously presented) The method of claim 28, wherein the step (a) determines the difference between the first and second reference signals by comparing a potential difference between a ground level and the VFO signal of the first header field with a potential difference between the ground level and the VFO signal of the third header field.

32. (Previously presented) The method of claim 23, wherein the first and second reference signals are a peak-to-peak value of the corresponding VFO signal.

33. (Previously presented) The method of claim 23, wherein the first and second reference signals are at least one from a bottom holding signal and a peak holding signal of the corresponding VFO signal.

34. (Previously presented) The method of claim 23, wherein the first and second reference signals are a hold signal of a center of the corresponding VFO signal.

35. (Currently amended) The method of claim ~~24~~21, wherein the step (b) further comprises:

comparing the determined difference of the first and second reference signals with a threshold value.

36. (Previously presented) The method of claim 34, further comprising:

(c) controlling the servo operation of the optical recording medium to compensate the radial tilt, if the compared difference is larger than the threshold value.

37. (Previously presented) The method of claim 21, wherein the plurality of header fields include at least first, second, third and fourth header fields in which the first and second header fields are staggered with respect to the third and fourth header fields.

38. (Previously presented) The method of claim 37, wherein the step (a) determines a difference between a first signal detected from the first and second header fields and a second signal detected from the third and fourth header fields, and the step (b) controls the servo operation of the optical recording medium based on the determined difference between the first and second detected signals.

39. (Previously presented) The method of claim 38, wherein the first reference signal corresponds to a signal read from the first header field, the second reference signal corresponds to a signal read from the second header field, a third reference signal corresponds to a signal read from the third header field, and a fourth reference signal corresponds to a signal read from the fourth header field, and

wherein the first signal detected from the first and second header fields is based on the first and second reference signals, and the second signal detected from the third and fourth header fields is based on the third and fourth reference signals.

40. (Previously presented) The method of claim 39, wherein the first, second, third and fourth reference signals comprise VFO (Variable Frequency Oscillator) signals.

41. (Previously presented) The method of claim 40, wherein the first, second, third and fourth VFO signals correspond to read channel 2 signals obtained from the first, second, third and fourth header fields, respectively, said read channel 2 signals corresponding to a difference between reflected signals obtained by a split photo detector.

42. (Previously presented) The method of claim 38, wherein the determined difference between the detected first and second signals represents a radial tilt of the optical recording medium.

43. (Previously presented) The method claim 42, wherein the controlling step (b) controls the servo operation of the optical recording medium to compensate the radial tilt based on the determined difference between the detected first and second signals.

44. (Previously presented) The method of claim 42, wherein the determining step (a) further includes detecting a magnitude and/or a direction of the radial tilt.

45. (Previously presented) The method of claim 44, wherein the controlling step (b) controls the servo operation of the optical recording medium to compensate the radial tilt based on the detected magnitude and/or direction of the radial tilt.

46-48. (Canceled).

49. (Currently amended) A method for controlling a servo operation of an optical recording medium including a non-writable area having first, second, third and fourth header fields in which the first and second header fields are staggered with the third and fourth header fields, the method comprising:

(a) determining a difference between a VFO (Variable Frequency Oscillator) signal of the first header field and a VFO signal of the third header field, wherein the determined difference between the VFO signal of the first header field and the VFO signal of the third header field represents a radial tilt of the optical recording medium; and

(b) controlling the servo operation based on the difference determined in the step (a).

50. (Currently amended) An apparatus for controlling a servo operation of an optical recording medium, the optical recording medium including a non-writable area having first, second, third and fourth header fields in which the first and second header fields are staggered with the third and fourth header fields, the apparatus comprising:

a pickup unit to record or read data on/from the optical recording medium;

a signal detector to detect a difference between a first synchronization reference signal included in the first header field and a second synchronization reference signal included in the third header field, wherein the determined difference between the first and second synchronization reference signals represent a radial tilt of the optical recording medium ~~at least one from i) a difference value between a signal from first and second reference signals~~

~~respectively read from the first and second header fields and a signal from third and fourth reference signals respectively read from the third and fourth header fields, and ii) a difference value between the first reference signal and the third reference signal~~;

a driving unit to drive the pickup unit; and

a servo controller to control the driving unit based on the determined difference between the first and second synchronization reference signals~~at least one from the difference values i) and ii) detected by the signal detector~~.